Marc Mangel

List of Publications by Year
in descending order

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149 papers	8,798 citations	57758 44 h-index	51608 86 g-index
171 all docs	171 docs citations	171 times ranked	7572 citing authors

#	Article	IF	Citations
1	The evolutionary advantages of group foraging. Theoretical Population Biology, 1986, 30, 45-75.	1.1	541
2	Towards a Unifield Foraging Theory. Ecology, 1986, 67, 1127-1138.	3.2	478
3	Foraging and Flocking Strategies: Information in an Uncertain Environment. American Naturalist, 1984, 123, 626-641.	2.1	381
4	Modelling the proximate basis of salmonid life-history variation, with application to Atlantic salmon, Salmo salar L.. Evolutionary Ecology, 1998, 12, 581-599.	1.2	350
5	Dynamic models in behavioural and evolutionary ecology. Nature, 1988, 332, 29-34.	27.8	340
6	The global contribution of forage fish to marine fisheries and ecosystems. Fish and Fisheries, 2014, 15, 43-64.	5.3	311
7	IMPLEMENTING THE PRECAUTIONARY PRINCIPLE IN FISHERIES MANAGEMENT THROUGH MARINE RESERVES. , 1998, 8, S72-S78.		276
8	Opposition site selection and clutch size in insects. Journal of Mathematical Biology, 1987, 25, 1-22.	1.9	238
9	Principles for the Conservation of Wild Living Resources. , 1996, 6, 338-362.		236
10	Ecology, Conservation, and Public Policy. Annual Review of Ecology, Evolution, and Systematics, 2001, 32, 481-517.	6.7	231
11	A Lifeâ€History Perspective on Shortâ€•and Longâ€Term Consequences of Compensatory Growth. American Naturalist, 2005, 166, E155-E176.	2.1	202
12	No-take Reserve Networks: Sustaining Fishery Populations and Marine Ecosystems. Fisheries, 1999, 24, 11-25.	0.8	196
13	THE BENEFITS OF INDUCED DEFENSES AGAINST HERBIVORES. Ecology, 1997, 78, 1351-1355.	3.2	184
14	Fluctuations of fish populations and the magnifying effects of fishing. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7075-7080.	7.1	178
15	Life expectancy and reproduction. Nature, 1993, 364, 108-108.	27.8	163
16	Evolution of Host Selection in Parasitoids: Does the State of the Parasitoid Matter?. American Naturalist, 1989, 133, 688-705.	2.1	142
17	Egg maturation, egg resorption and the costliness of transient egg limitation in insects. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 1565-1573.	2.6	130
18	Regime, phase and paradigm shifts: making community ecology the basic science for fisheries. Philosophical Transactions of the Royal Society B: Biological Sciences, 2005, 360, 95-105.	4.0	121

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19	MODELING INVESTMENTS IN SEEDS, CLONAL OFFSPRING, AND TRANSLOCATION IN A CLONAL PLANT. Ecology, 1999, 80, 1202-1220.	3.2	117
20	On the evolutionary ecology of marking pheromones. Evolutionary Ecology, 1988, 2, 289-315.	1.2	116
21	Non-genetic inheritance and changing environments. Non-Genetic Inheritance, 2013, 1, .	0.8	113
22	PREY STATE AND EXPERIMENTAL DESIGN AFFECT RELATIVE SIZE OF TRAIT- AND DENSITY-MEDIATED INDIRECT EFFECTS. Ecology, 2003, 84, 1140-1150.	3.2	110
23	Uncertainty, search, and information in fisheries. ICES Journal of Marine Science, 1983, 41, 93-103.	2.5	100
24	Oviposition habitat selection by the mosquito Culiseta longiareolata in response to risk of predation and conspecific larval density. Ecological Entomology, 2003, 28, 168-173.	2.2	99
25	A perspective on steepness, reference points, and stock assessment. Canadian Journal of Fisheries and Aquatic Sciences, 2013, 70, 930-940.	1.4	94
26	Reproductive ecology and scientific inference of steepness: a fundamental metric of population dynamics and strategic fisheries management. Fish and Fisheries, 2010, 11, 89-104.	5.3	88
27	Overcoming the Data Crisis in Biodiversity Conservation. Trends in Ecology and Evolution, 2018, 33, 676-688.	8.7	85
28	A Simple Population Estimate Based on Simulation for Capture-Recapture and Capture-Resight Data. Ecology, 1989, 70, 1738-1751.	3.2	83
29	Ten principles from evolutionary ecology essential for effective marine conservation. Ecology and Evolution, 2016, 6, 2125-2138.	1.9	83
30	Habitat Loss and Changes in the Speciesâ€Area Relationship. Conservation Biology, 2000, 14, 893-898.	4.7	78
31	Patchâ€leaving rules for parasitoids with imperfect host discrimination. Ecological Entomology, 1994, 19, 374-380.	2.2	77
32	Abraham Wald's Work on Aircraft Survivability. Journal of the American Statistical Association, 1984, 79, 259-267.	3.1	72
33	Evolution of Sizeâ€Dependent Flowering inOnopordum illyricum: A Quantitative Assessment of the Role of Stochastic Selection Pressures. American Naturalist, 1999, 154, 628-651.	2.1	67
34	Steelhead Life History on California's Central Coast: Insights from a Stateâ€Dependent Model. Transactions of the American Fisheries Society, 2009, 138, 532-548.	1.4	67
35	Title is missing!. Hydrobiologia, 2002, 485, 183-189.	2.0	63
36	QUANTIFYING NATURAL SELECTION ON BODY SIZE FROM FIELD DATA: WINTER MORTALITY IN MENIDIA MENIDIA. Ecology, 2003, 84, 2168-2177.	3.2	62

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37	Determining Individual Variation in Growth and Its Implication for Life-History and Population Processes Using the Empirical Bayes Method. PLoS Computational Biology, 2014, 10, e1003828.	3.2	61
38	Stateâ€dependent life history models in a changing (and regulated) environment: steelhead in the California Central Valley. Evolutionary Applications, 2010, 3, 221-243.	3.1	60
39	Using Grizzly Bears to Assess Harvest-Ecosystem Tradeoffs in Salmon Fisheries. PLoS Biology, 2012, 10, e1001303.	5.6	60
40	Density-dependent body growth reduces the potential of marine reserves to enhance yields. Journal of Applied Ecology, 2005, 43, 61-69.	4.0	57
41	Growth, telomere dynamics and successful and unsuccessful human aging. Mechanisms of Ageing and Development, 2003, 124, 829-837.	4.6	56
42	A Dynamic State Model of Migratory Behavior and Physiology to Assess the Consequences of Environmental Variation and Anthropogenic Disturbance on Marine Vertebrates. American Naturalist, 2018, 191, E40-E56.	2.1	56
43	Predation-dependent oviposition habitat selection by the mosquito Culiseta longiareolata: a test of competing hypotheses. Ecology Letters, 2002, 6, 35-40.	6.4	54
44	Reproductive senescence and dynamic oviposition behaviour in insects. Evolutionary Ecology, 1998, 12, 871-879.	1.2	53
45	Bayesian nonparametric analysis of stockÂ–recruitment relationships. Canadian Journal of Fisheries and Aquatic Sciences, 2005, 62, 1808-1821.	1.4	51
46	EVOLUTIONARY ANALYSIS OF LIFE SPAN, COMPETITION, AND ADAPTIVE RADIATION, MOTIVATED BY THE PACIFIC ROCKFISHES (SEBASTES). Evolution; International Journal of Organic Evolution, 2007, 61, 1208-1224.	2.3	49
47	ECOLOGICAL GAMES IN SPACE AND TIME: THE DISTRIBUTION AND ABUNDANCE OF ANTARCTIC KRILL AND PENGUINS. Ecology, 2003, 84, 1598-1607.	3.2	44
48	Age and longevity in fish, with consideration of the ferox trout. Experimental Gerontology, 2001, 36, 765-790.	2.8	43
49	Search and Stock Depletion: Theory and Applications. Canadian Journal of Fisheries and Aquatic Sciences, 1985, 42, 150-163.	1.4	41
50	Anthropogenic disturbance in a changing environment: modelling lifetime reproductive success to predict the consequences of multiple stressors on a migratory population. Oikos, 2019, 128, 1340-1357.	2.7	41
51	A Statistical Framework for the Adaptive Management of Epidemiological Interventions. PLoS ONE, 2009, 4, e5807.	2.5	40
52	Smolt Transformation in Two California Steelhead Populations: Effects of Temporal Variability in Growth. Transactions of the American Fisheries Society, 2010, 139, 1263-1275.	1.4	40
53	A unified treatment of top-down and bottom-up control of reproduction in populations. Ecology Letters, 2005, 8, 691-695.	6.4	39
54	Connecting recruitment of Antarctic krill and sea ice. Limnology and Oceanography, 2009, 54, 799-811.	3.1	39

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55	Modeling play: distinguishing between origins and current functions. Adaptive Behavior, 2015, 23, 331-339.	1.9	39
56	Lifeâ€“history tradeâ€“offs and ecological dynamics in the evolution of longevity. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 1143-1150.	2.6	38
57	Phenotypic Evolutionary Models in Stem Cell Biology: Replacement, Quiescence, and Variability. PLoS ONE, 2008, 3, e1591.	2.5	38
58	Cold snaps, heatwaves, and arthropod growth. Ecological Entomology, 2016, 41, 653-659.	2.2	38
59	Maternal age, fecundity, egg quality, and recruitment: linking stock structure to recruitment using an age-structured Ricker model. Canadian Journal of Fisheries and Aquatic Sciences, 2012, 69, 1631-1641.	1.4	37
60	Adaptive walks on behavioural landscapes and the evolution of optimal behaviour by natural selection. Evolutionary Ecology, 1991, 5, 30-39.	1.2	36
61	Life history invariants, age at maturity and the ferox trout. Evolutionary Ecology, 1996, 10, 249-263.	1.2	36
62	Contrasts in Habitat Characteristics and Life History Patterns of Oncorhynchus mykiss in California's Central Coast and Central Valley. Transactions of the American Fisheries Society, 2012, 141, 747-760.	1.4	36
63	Stateâ€dependent behavioural theory for assessing the fitness consequences of anthropogenic disturbance on capital and income breeders. Methods in Ecology and Evolution, 2017, 8, 552-560.	5.2	36
64	Descriptions of superparasitism by optimal foraging theory, evolutionarily stable strategies and quantitative genetics. Evolutionary Ecology, 1992, 6, 152-169.	1.2	35
65	Fishing-induced evolution and changing reproductive ecology of fish: the evolution of steepness. Canadian Journal of Fisheries and Aquatic Sciences, 2010, 67, 1708-1719.	1.4	35
66	A model at the level of the foraging trip for the indirect effects of krill (Euphausia superba) fisheries on krill predators. Ecological Modelling, 1998, 105, 235-256.	2.5	34
67	State-Dependent Mate-Assessment and Mate-Selection Behavior in Female Threespine Sticklebacks (Gasterosteus aculeatus, Gasterosteiformes: Gasterosteidae). Ethology, 2001, 107, 545-558.	1.1	34
68	Spatial and temporal scale of density-dependent body growth and its implications for recruitment, population dynamics and management of stream-dwelling salmonid populations. Reviews in Fish Biology and Fisheries, 2012, 22, 813-825.	4.9	34
69	Assessing opportunity and relocation costs of marine protected areas using a behavioural model of longline fleet dynamics. Fish and Fisheries, 2012, 13, 139-157.	5.3	34
70	A meta-analysis of fecundity in rockfishes (genus Sebastes). Fisheries Research, 2017, 187, 73-85.	1.7	33
71	Stateâ€Dependent Migration Timing and Use of Multiple Habitat Types in Anadromous Salmonids. Transactions of the American Fisheries Society, 2012, 141, 781-794.	1.4	32
72	Reproductive hyperallometry and managing the worldâ€™s fisheries. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	31

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73	Withinâ€•and amongâ€population variation in vital rates and population dynamics in a variable environment. Ecological Applications, 2016, 26, 2086-2102.	3.8	30
74	Avoiding tipping points in fisheries management through Gaussian process dynamic programming. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20141631.	2.6	29
75	Trends and Carrying Capacity of Sea Otters in Southeast Alaska. Journal of Wildlife Management, 2019, 83, 1073-1089.	1.8	29
76	A state-dependent model for assessing the population consequences of disturbance on income-breeding mammals. Ecological Modelling, 2018, 385, 133-144.	2.5	28
77	Selectivity matters: Rules of thumb for management of plateâ€sized, sexâ€changing fish in the live reef food fish trade. Fish and Fisheries, 2017, 18, 821-836.	5.3	27
78	Conditioned averages in chemical kinetics. Journal of Chemical Physics, 1981, 75, 704-709.	3.0	25
79	The shape of things to come: using models with physiological structure to predict mortality trajectories. Theoretical Population Biology, 2004, 65, 353-359.	1.1	25
80	Stochastic Dynamic Programming Illuminates the Link Between Environment, Physiology, and Evolution. Bulletin of Mathematical Biology, 2015, 77, 857-877.	1.9	25
81	Using Life History And Persistence Criteria To Prioritize Habitats For Management And Conservation. , 2006, 16, 797-806.		24
82	MULTIPLE HYPOTHESIS TESTING AND THE DECLINING-POPULATION PARADIGM IN STELLER SEA LIONS. , 2008, 18, 1932-1955.		24
83	Interacting effects of behavior and oceanography on growth in salmonids with examples for coho salmon (Oncorhynchus kisutch). Canadian Journal of Fisheries and Aquatic Sciences, 2005, 62, 1219-1230.	1.4	23
84	Genetic and life-history consequences of extreme climate events. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20162118.	2.6	23
85	A framework for assessing the biodiversity and fishery aspects of marine reserves. Journal of Applied Ecology, 2009, 46, 735-742.	4.0	22
86	Stem cell biology is population biology: differentiation of hematopoietic multipotent progenitors to common lymphoid and myeloid progenitors. Theoretical Biology and Medical Modelling, 2013, 10, 5.	2.1	22
87	The emotion system promotes diversity and evolvability. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20141096.	2.6	22
88	The strong connection between forage fish and their predators: A response to Hilborn et al. (2017). Fisheries Research, 2018, 198, 220-223.	1.7	21
89	Early oviposition experience affects patch residence time in a foraging parasitoid. Entomologia Experimentalis Et Applicata, 2001, 98, 123-132.	1.4	18
90	Modeling optimal responses and fitness consequences in a changing Arctic. Global Change Biology, 2019, 25, 3450-3461.	9.5	18

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91	Applying scientific principles in international law on whaling. Science, 2014, 345, 1125-1126.	12.6	17
92	Tradeâ€offs between accuracy and interpretability in von <scp>B</scp>ertalanffy randomâ€effects models of growth. Ecological Applications, 2016, 26, 1535-1552.	3.8	17
93	Stochastic Dynamics of Interacting Haematopoietic Stem Cell Niche Lineages. PLoS Computational Biology, 2014, 10, e1003794.	3.2	16
94	Feedback control in planarian stem cell systems. BMC Systems Biology, 2016, 10, 17.	3.0	15
95	Predicting the population consequences of acoustic disturbance, with application to an endangered gray whale population. Ecological Applications, 2021, 31, e02440.	3.8	15
96	Mosquito Biting and Movement Rates as an Emergent Community Property and The Implications for Malarial Interventions. Israel Journal of Ecology and Evolution, 2010, 56, 297-312.	0.6	14
97	Estimating species composition and quantifying uncertainty in multispecies fisheries: hierarchical Bayesian models for stratified sampling protocols with missing data. Canadian Journal of Fisheries and Aquatic Sciences, 2012, 69, 231-246.	1.4	14
98	Evolutionary optimization and neural network models of behavior. Journal of Mathematical Biology, 1990, 28, 237-56.	1.9	13
99	Behavioral models as a common framework to predict impacts of environmental change on seabirds and fur seals. Deep-Sea Research Part II: Topical Studies in Oceanography, 2012, 65-70, 304-315.	1.4	13
100	Ecosystem Oceanography of Seabird Hotspots: Environmental Determinants and Relationship with Antarctic Krill Within an Important Fishing Ground. Ecosystems, 2017, 20, 885-903.	3.4	13
101	Bayesian analysis of sizeâ€dependent overwinter mortality from sizeâ€frequency distributions. Ecology, 2010, 91, 1016-1024.	3.2	12
102	Risk sensitivity and the behaviour of fishing vessels. Fish and Fisheries, 2015, 16, 399-425.	5.3	12
103	The inverse lifeâ€history problem, sizeâ€dependent mortality and two extensions of results of Holt and Beverton. Fish and Fisheries, 2017, 18, 1192-1200.	5.3	12
104	The Behavioral Ecology of Fishing Vessels: Achieving Conservation Objectives Through Understanding the Behavior of Fishing Vessels. Environmental and Resource Economics, 2015, 61, 71-85.	3.2	11
105	Whales, science, and scientific whaling in the International Court of Justice. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14523-14527.	7.1	11
106	Parent-offspring conflict over reproductive timing: ecological dynamics far away and at other times may explain spawning variability in Pacific herring. ICES Journal of Marine Science, 2019, 76, 559-572.	2.5	11
107	Density dependence, lifespan and the evolutionary dynamics of longevity. Theoretical Population Biology, 2009, 75, 46-55.	1.1	10
108	Accounting for indirect effects and non-commensurate values in ecosystem based fishery management (EBFM). Marine Policy, 2010, 34, 114-119.	3.2	10

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109	Asymptotic size and natural mortality of long-lived fish for data poor stock assessments. Fisheries Research, 2012, 127-128, 45-48.	1.7	10
110	Threshold levels of generalist predation determine consumer response to resource pulses. Oikos, 2015, 124, 1436-1443.	2.7	10
111	Reference Points for Optimal Yield: A Framework for Assessing Economic, Conservation, and Sociocultural Tradeoffs in Ecosystem-Based Fishery Management. Coastal Management, 2016, 44, 517-528.	2.0	10
112	Stationary distribution of population size inTribolium. Bulletin of Mathematical Biology, 1989, 51, 625-638.	1.9	9
113	A dynamic habitat selection game. Mathematical Biosciences, 1990, 100, 241-248.	1.9	9
114	Scientific inference and experiment in Ecosystem Based Fishery Management, with application to Steller sea lions in the Bering Sea and Western Gulf of Alaska. Marine Policy, 2010, 34, 836-843.	3.2	9
115	Linking physiological approaches to marine vertebrate conservation: using sex steroid hormone determinations in demographic assessments. , 2014, 2, cot035-cot035.		9
116	Climate variability and multi-scale assessment of the krill preyscape near the north Antarctic Peninsula. Polar Biology, 2017, 40, 697-711.	1.2	9
117	Operationalizing triple bottom line harvest strategies. ICES Journal of Marine Science, 2021, 78, 731-742.	2.5	9
118	Regulatory Mechanisms and Information Processing in Uncertain Fisheries. Marine Resource Economics, 1985, 1, 389-418.	2.0	9
119	Linking food availability, body growth and survival in the black-legged kittiwake Rissa tridactyla. Deep-Sea Research Part II: Topical Studies in Oceanography, 2013, 94, 192-200.	1.4	8
120	Thermal Potential for Steelhead Life History Expression in a Southern California Alluvial River. Transactions of the American Fisheries Society, 2015, 144, 258-273.	1.4	8
121	amei: AnRPackage for the Adaptive Management of Epidemiological Interventions. Journal of Statistical Software, 2010, 36, .	3.7	8
122	Applied Mathematicians and Naval Operators. SIAM Review, 1982, 24, 289-300.	9.5	7
123	Weapon acquisition with target uncertainty. Naval Research Logistics Quarterly, 1985, 32, 567-588.	0.4	7
124	Optimising harvest strategies over multiple objectives and stakeholder preferences. Ecological Modelling, 2020, 435, 109243.	2.5	7
125	Invariant Ratios Vs. Dimensionless Ratios. Science, 2005, 310, 1426-1427.	12.6	6
126	State-dependent behavioral theory and the evolution of play. Adaptive Behavior, 2015, 23, 362-370.	1.9	6

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127	Intercohort size structure dynamics of fire salamander larvae in ephemeral habitats: a mesocosm experiment. Oecologia, 2015, 179, 425-433.	2.0	6
128	A latitudinal gradient in thermal transgenerational plasticity and a test of theory. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210797.	2.6	6
129	The evolutionary ecology of stem cells and their niches â€“ the time is now. Oikos, 2007, 116, 1779-1781.	2.7	5
130	Size-conditional smolting and the response of Carmel River steelhead to two decades of conservation efforts. PLoS ONE, 2017, 12, e0188971.	2.5	5
131	Propensity for Risk in Reproductive Strategy Affects Susceptibility to Anthropogenic Disturbance. American Naturalist, 2020, 196, E71-E87.	2.1	5
132	Density-independent mortality at early life stages increases the probability of overlooking an underlying stockâ€“recruitment relationship. ICES Journal of Marine Science, 2021, 78, 2193-2203.	2.5	5
133	Stochastic dynamic programming: An approach for modelling the population consequences of disturbance due to lost foraging opportunities. Proceedings of Meetings on Acoustics, 2016, , .	0.3	5
134	Prevention Versus Remediation in Resistance Management. ACS Symposium Series, 1996, , 169-186.	0.5	4
135	A Framework for Exploring the Role of Bioeconomics on Observed Fishing Patterns and Ecosystem Dynamics. Coastal Management, 2016, 44, 529-546.	2.0	4
136	Diffusion theory of reaction rates for multiple potential barriers. Journal of Chemical Physics, 1981, 75, 5969-5971.	3.0	3
137	Principles for the conservation of wild living resources. Environment and Development Economics, 1997, 2, 39-110.	1.5	3
138	The Important Role of Theory in Conservation Biology. Conservation Biology, 2002, 16, 843-844.	4.7	3
139	A generalized perturbation approach for exploring stock recruitment relationships. Theoretical Ecology, 2015, 8, 1-13.	1.0	3
140	Know your organism, know your dataâ€. ICES Journal of Marine Science, 2017, 74, 1237-1248.	2.5	3
141	Matrix methods for stochastic dynamic programming in ecology and evolutionary biology. Methods in Ecology and Evolution, 2019, 10, 1952-1961.	5.2	3
142	Required reading for (ecological) battles. Trends in Ecology and Evolution, 2001, 16, 110-111.	8.7	2
143	Sidney Holt on principles for the conservation of wild living resources, whaling in the Antarctic, and the Bevertonâ€“Holt stockâ€“recruitment relationship. ICES Journal of Marine Science, 2021, 78, 2211-2217.	2.5	2
144	Four examples and a metaphor. , 0, , 1-19.		1

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145	Quantifying the effect of vessel interference on catch rates: A theoretical approach. Ecological Modelling, 2017, 359, 293-300.	2.5	1
146	: On the cusp of a revolution in foraging theory. Theoretical Population Biology, 2020, 133, 25-26.	1.1	1
147	Modeling Coupled Nonlinear Multilayered Dynamics: Cyber Attack and Disruption of an Electric Grid. Complexity, 2021, 2021, 1-19.	1.6	1
148	Dynamic theories of behavior. Behavioral and Brain Sciences, 1988, 11, 139-141.	0.7	0
149	Discussion: From individuals to ecosystems; the papers of Skellam, Lindeman and Hutchinson. Bulletin of Mathematical Biology, 1991, 53, 119-134.	1.9	0